Bicyclic heterocycles, processes for their preparation and their use as herbicides and pharmaceutical agents

Compounds of the formula (I), their tautomers, their salts and their water addition products,

$$\begin{array}{c|c}
N & N \\
\downarrow & N \\
\hline
N & D \\
\hline
G & -L
\end{array}$$
(I)

where the radicals and symbols A, D, E, G and L are as defined in claim 1 and, for example, A = N, CR; D = C or N,

E = a) an N atom or C-R<sup>o</sup>, if in each case D = N, or

b)  $N-R^{O}$ , -O-, -S-, -SO- or -SO<sub>2</sub>-, if in each case D = C,

the line of dots (•••••) from D via a ring carbon atom to E is a double bond between the ring carbon atom and E if D = N (case a), or is a double bond between ring carbon atom and D if D = C (case b),

R, R<sup>O</sup> = H or an aliphatic or aromatic radical (see claim 1);

G is a divalent hydrocarbon bridge having 1-24 carbon atoms in the chain, in which chain members can be replaced by O, S, NH,  $(C_1-C_4)$ alkyl-N or acyl-N, and, in the unsaturated case, by an N atom, where the bridge is unsubstituted or substituted,

L, L\* independently of one another are each  $OR^4$ ,  $SR^4$ , CN, tetrazolo,  $C(OR^5)(OR^6)(OR^7)$ ,  $-Z^1$ ,  $-O-Z^2$ ,  $-S-Z^2$  or  $-NH-Z^2$ , where L may be attached cyclically to G via a second direct bond or via a heteroatom N, O or S,  $Z^1$ ,  $Z^2$  are each the radical of an oxygen acid  $Z^1$ -OH and  $Z^2$ -OH, respectively.

 $R^1$  to  $R^7$  = H or an organic radical (see claim 1),

are direct or indirect inhibitors of the enzyme adenosine monophosphate deaminase (AMPDA) or adenosine deaminase (ADA) and are suitable for use as herbicides or pharmaceuticals for the treatment of diseases which







can be treated by inhibiting the enzyme AMPDA or ADA. For the preparation, cf. claims 8-12.